Submission to the Murray-Darling Basin Royal Commission

William Johnson

ToR 1: Whether the Water Resource Plans defined by the Act and Basin Plan (which are to include the long-term average sustainable diversion limits for each Basin water resource) will be delivered in full and in a form compliant and consistent with the Basin Plan by 30 June 2019.

I consider that there is a strong likelihood that some New South Wales Water Resource Plans will not be delivered in full and in a form compliant and consistent with the Basin Plan by 30 June 2019.

ToR 2: If any Water Resource Plans are unlikely to be delivered in full and in a form compliant and consistent with the Basin Plan, the reasons for this.

Lack of will and capacity in MDBA to ensure that WRPs are compliant

For some years after the Basin Plan was made, it was the view of some MDBA staff that reviewing water resource plans would be a 'tick and flick' process, if that was what was required to ensure that they were completed on schedule. I believe that the states were aware of this.

An officer of the NSW water agency told me that, that in his view, MDBA was not sufficiently familiar with NSW water planning processes to ensure that it was able to review the NSW Water Resource Plans effectively.

MDBA has a weak regulatory culture and has been reluctant to use its powers. MDBA's public position on many regulatory matters is that it is powerless to act, and that most regulatory functions are the responsibility of the states.

The structure of NSW Water Resource Plans

I understand that in NSW, under the Basin Plan, Water Resource Plans will be 'umbrella plans' providing a framework for subsidiary plans. The subsidiary plans will include water sharing plans, long-term environmental watering plans and salinity management plans.

Much of the important detail will be in Water Sharing Plans. It is extremely important that the subsidiary plans are part of the Water Resource Plan review and accreditation process.

Reduced capacity and slow progress in NSW

I am a member of the Stakeholder Advisory Panel for the Barwon-Darling Water Resource Plan. The panel has been meeting since the beginning of 2017 and little of substance has been achieved.

- There has been discussion of issues but no discussions or viewing of a Draft Water Resource Plan, and no agreement on planning provisions.
- There has been no discussion of a new Barwon-Darling Water Sharing Plan.
- The existing Barwon-Darling Water Sharing Plan contains provisions to limit
 extraction of water from the lowest flows (A Class licences) that were never
 implemented. The manner in which this came about is a source of suspicion of
 inappropriate influence by the irrigation industry with regard to the Plan. In the
 meetings of the Barwon-Darling Stakeholder Advisory Panel there has been
 extensive discussion but no resolution of this matter.
- The Stakeholder Advisory Panel is working on the assumption that Barwon-Darling water use is within the Murray-Darling Basin Cap, although an MDBA memo of February 2014 asserts that the only reason for this is that NSW has changed the model to make it so. That if it hadn't the BD would have breached Cap every year since 1995.

Unless important underlying issues are addressed some Water Resource Plans will not be accepted by communities.

Not enough time remaining to complete compliant plans

Almost five and a half years have passed since the Basin Plan was made and fourteen months remain for states to complete Water Resource Plans. Despite official statements to the contrary, given the staff turnover and the loss of experienced planning and technical staff in NSW in the last few years, it is difficult to see how NSW can prepare compliant plans for all its rivers by June 30 1019.

ToR 3: Whether the Basin Plan in its current form, its implementation, and any proposed amendments to the Plan, are likely to achieve the objects and purposes of the Act and Plan as variously outlined in ss.3, 20, 23 and 28 of the Act, and the 'enhanced environmental outcomes' and additional 450 GL provided for in s. 86AA(2) and (3) of the Act, respectively.

It is the way the Plan is being implemented that is the main impediment to achieving several of its objects and purposes. The implementation of the Plan is undermining the Act and the Plan. The Northern Basin Review and the SDL Adjustment amendments are part of this.

An important underlying factor is that hydrology models, cap factors and planning assumptions, buybacks, and government funded water use efficiency schemes are being managed in ways that have undermined the environment's share of water in favour of the irrigation industry.

The Northern Basin Review amendment

The Murray-Darling Basin Authority carried out the Northern Basin Review to gather more information about the needs of the natural environment, the views of Aboriginal people, the social values of communities and towns, and the importance of irrigation.

This information was then to be linked to computer-based river flow models (hydrology models) to work out the relationships between water, people and river health.

There are reasons to be concerned about the way MDBA reached its conclusions;

- the new information for the Northern Basin Review is patchy, focussing on a small area of the northern Basin along the Barwon-Darling, the Condamine and Lower-Balonne floodplain, and Narran Lake. The Northern Basin Amendment involves all the rivers of the Northern Basin, for most of which no new information was gathered.
- The MDBA's socio-economic, Aboriginal cultural values, and environmental assessments did not include most of the Darling River, or communities on the Darling River below Bourke.
- Aboriginal community views and the findings of the work relating to Aboriginal community values have been ignored.
- The hydrology models were used well beyond their capacity. The models don't represent low and medium flows, especially those on the Barwon-Darling represented by flows of 2,000 megalitres per day or less at Bourke. Since 2000, flows have been lower than this 75 per cent of the time.
- There is no reliable way to link river and community health information to hydrology models even when models are reasonable. Results have little meaning when hydrology models are as poor as are those for the Northern Basin.

Much is made of the 'toolkit measures.' The tools include proper metering, protecting environmental water, ensuring effective compliance with the law, works to improve conditions for fish to travel along the river, allow better water delivery to the Gwydir Wetlands, and coordination of environmental flows. These mechanisms are explicit in the Basin Plan and implicit in the calculations relating to environmental outcomes. Basing some of the justification for the reduction on 'toolkit measures' involves double counting their effects.

The recommendation from the Northern Basin Review is inconsistent with s 3 of the Act, especially in relation to the Ramsar Convention, the Bonn Convention, and Australia's Migratory Bird Agreements with Japan, China and the Republic of Korea. They are inconsistent with regard to;

- The scientific findings for the Ramsar-listed Narran Lake, which found that more water is required, more frequently, for protection of waterbirds.
- The Macquarie Marshes and the Gwydir Wetlands. The review recommends a reduction in flows to these Ramsar-listed wetlands based on cap factors and planning assumptions. Cap factors and planning assumptions are applied inconsistently across the Basin and between consumptive and environmental water.

No new scientific work was carried out in the Macquarie Marshes or the Gwydir Wetlands.

ToR 5: If the Basin Plan is unlikely to achieve any of the objects and purposes of the Act and Basin Plan and/or the 'enhanced environmental outcomes' and the additional 450 GL referred to above, what amendments should be made to the Basin Plan or Act to achieve those objects and purposes, the 'enhanced environmental outcomes' and the additional 450 GL?

At present the most significant problems lies with the implementation of the Plan, rather than the Plan itself. It is difficult to recommend changes to the Water Act or the Basin Plan when their implementation has been compromised.

As a minimum, the proposed amendments, buybacks and efficiency programs should be halted until there is a complete, thorough and independent review of the implementation of the Plan.

Water Resource Plan development should be suspended until means of estimating, and ways of using, Cap Factors, Planning Assumptions and Long Term Diversion Limit Equivalence are clarified.

ToR 6: Any legislative or other impediments to achieving any of the objects and purposes of the Act and Basin Plan and/or the 'enhanced environmental outcomes' and additional 450 GL referred to above, and any recommendations for legislative or other change if needed.

Legislative change is required in NSW, at least. Good starting points are the recommendations in the reports by Ken Matthews, the Murray-Darling Basin Authority Independent Review Panel and the NSW Ombudsman.

The Matthews Final Report recommends steps necessary to restore community confidence in the management of rivers in NSW. The report pays special attention to the Barwon-Darling, suggesting that the following steps should be considered urgently;

- Adjusting commence-to-pump rules for A Class licences in the Barwon-Darling.
- Using the Individual and Total Daily Extraction Limits already provided for in the Barwon-Darling Water Sharing Plan.
- Adjusting or abolishing carryover in unregulated streams.
- Using up-to-date technology, including satellite images, to measure and check water extraction.
- Creating a position for a river operator to manage flows and extraction.
- Ensuring that the NSW compliance and enforcement system is transparent, independent and effective.

These provide the foundation for other recommendations;

- Managing flows as they occur.
- Better use of scientific knowledge of the river.
- Agreements with major irrigators.

ToR 7: The likely impact of alleged illegal take or other forms of non-compliance on achieving any of the objects and purposes of the Act and Basin Plan, and the 'enhanced environmental outcomes' and the additional 450 GL, referred to above.

The objects and purposes of the Act will be undermined.

ToR 8: In relation to any found instances of illegal take or work, whether appropriate enforcement proceedings have been taken in respect of such matters and if not, why.

I understand that appropriate enforcement proceedings have been, or will be, taken by the Queensland Police in relation to alleged fraud by Norman Farming in its dealings with the Healthy Headwaters Water Use Efficiency Program .

The NSW Government has begun appropriate proceedings against irrigators in Northern NSW in relation to allegations of water theft first aired by Four Corners.

My concern is that the NSW water agencies (Department of Industry, Water and WaterNSW) and the Commonwealth agencies (Murray-Darling Basin Authority and Department of Agriculture and Water) did not begin investigations until media and public pressure forced their hands. These departments denied that there was any wrongdoing, or

claimed that it was not their responsibility. The Queensland Police was the only agency that took appropriate action in response to information received. The other agencies did so only after publicity in Four Corners, Lateline and the 7.30 report, and strong public pressure, and then only to the minimum level.

I do not know of any action taken by the Commonwealth agencies with regulatory responsibilities (MDBA), or subject to the alleged fraud (DAWR). It is MDBA's public position that it is not it's responsibility, and in any case there is nothing it can do.

ToR 9: Whether, in any event, the enforcement and compliance powers under the Act are adequate to prevent and address non-compliance with the Act and the Basin Plan, and any recommendations for legislative or other change if needed.

The enforcement and compliance powers under the Act are greater than MDBA's public position suggests. It is difficult to know if they are adequate, as they have not been tested.

MDBA seems to have a similar relationship with the states and the irrigation industry as ASIC is reported to have had with the banks. MDBA had and still has a weak regulatory culture and few staff with regulatory experience. It has long been known that senior staff responsible for water resource planning wished to avoid challenging the states and feared legal challenges to the Basin Plan.

ToR 10: Whether monitoring, metering and access to relevant information (such as usage data) is adequate to achieve the objects and purposes of the Act and Basin Plan and the 'enhanced environmental outcomes' and additional 450 GL referred to above.

These are inadequate.

There are many examples of shortcomings in monitoring, metering and access to relevant information. One with significant capacity to undermine the objects and purposes of the Act and the Basin Plan is the NSW Floodplain Harvesting Policy

These shortcomings in relation to the NSW Floodplain Harvesting Policy have the potential for very serious consequences for downstream rivers and communities. This policy proposes that irrigators be given tradeable, compensable rights to an unknown volume of water.

The NSW Floodplain Harvesting Policy was approved in 2013, following targeted consultation in 2008 and public exhibition in 2010.

At a consultation meeting in Dubbo on the 16th March 2018 an officer of the Department of Industry Water said that the amount of water taken in floodplain harvesting has been 'grossly underestimated.' In spite of this, the NSW Government proposes to;

- license all existing floodplain harvesting, while acknowledging that 'there is currently no monitoring of floodplain harvesting diversions' and that no-one knows how much is being taken,
- base floodplain harvesting entitlements on recent climate records, or 'the long-term average if that is greater,'
- allow unlimited carryover, and account balance and annual usage limits five times the licensed entitlement,
- make licences compensatable, under an amendment to the NSW Water Act in 2014.

The Department of Industry's implementation paper says that these conditions will result in 'fairer outcomes for irrigators.'

This is proposed although there is no figure for floodplain harvesting, and only estimates the volume of on-farm storage capacity. The Water Department estimates storage volumes of about;

- 207,000 megalitres in the NSW Border Rivers in 2008/09, with 4,000 megalitres approved
- 614,000 megalitres in the Gwydir.
- 315,000 on the Barwon-Darling.

This amounts to at least 1,100,000 megalitres of on-farm storage capacity in just three valleys in NSW. The implementation paper doesn't give figures for the Namoi, the Macquarie, the Lachlan or the Murrumbidgee, and doesn't include the millions of megalitres of on-farm storage in Queensland.

The NSW government doesn't know how much is being taken from the floodplains of its rivers. There's no monitoring or measuring of water being taken by floodplain harvesting. Even so, the NSW government proposes to license it.

The plan is that floodplain harvesting will be measured, and the volume worked out, after it is licensed. Some important questions are;

- How can these new licences be given as a property right if they have never been measured and no-one knows how much is already being used?
- What are the consequences of unlimited carryover, combined with annual usage limits and account balances five times the entitlement volume?
- What do they mean for the amount used, and the water in the rivers downstream?

• Why doesn't the policy consider the effects on communities and the environment downstream?

The effects of this policy, with Queensland included, will be banks and channels intercepting water and diverting it to storages across the floodplains of the Basin north of the Murray. An unknown volume of water will be taken from the rivers, in an arc from the Condamine-Balonne, to the Murrumbidgee. There are no guarantees that there will be any limits on extraction except the capacity of pumps and storages. The best the Department's paper can say that there is 'less potential for growth and impact on other water users.'

ToR 11: Whether water that is purchased by the Commonwealth for the purposes of achieving the objects and purposes of the Act and Basin Plan and/or the 'enhanced environmental outcomes' and the additional 450 GL referred to above will be adequately protected from take for irrigation under water resource plans, and any recommendations for legislative or other change if needed.

The Four Corners story, 'Pumped,' in 2017 showed what many people suspected, but didn't know for sure. It showed a system where most people were excluded from important decisions about the future of the river, where information was shared with a select few and decisions made behind closed doors.

Following Four Corners, the NSW Government commissioned an investigation into water management and compliance in NSW. The report by Ken Matthews is very clear, with a list of tasks necessary to restore community confidence in the management of rivers in NSW. He pays special attention to the Barwon-Darling. His report suggests that the following things should be considered urgently;

- adjusting commence-to-pump rules for A Class licences in the Barwon-Darling,
- using the Individual and Total Daily Extraction Limits already provided for in the Barwon-Darling Water Sharing Plan,
- adjusting or abolishing carryover in unregulated streams,
- using up-to-date technology, including satellite images, to measure and check water extraction,
- creating a position for a river operator to manage flows and extraction.

These provide the foundation for other recommendations;

- managing flows as they occur,
- better use of scientific knowledge of the river,
- agreements with major irrigators.

ToR 12: Whether the Basin Plan in its current form, its implementation, and any proposed amendments to the Plan, are adequate to achieve the objects and purposes of the Act and Basin Plan, the 'enhanced environmental outcomes' and the additional 450 GL referred to above, taking into account likely, future climate change.

No, the implementation of the Basin Plan will not achieve objects s 3 (a), (b), (c), (d), (i), (ii), (e), (f), (g) or (h).

It will achieve s 3 (d), (iii), but only by limiting paragraphs (b) and (c) of s 3, and only in the narrowest terms of maximising irrigation production.

It is my view that some government officials, elected representatives and representatives of the irrigation industry are aware of the combined effects of climate change, Australia's natural variability, and the original over-commitment of water to irrigation.

Analysis of security of water supply shows a combination of factors that has eroded the reliability of water entitlements, both irrigation and environmental. For the past 20 to 25 years reliability has been significantly lower (between 40 and 60 per cent on many rivers) than the long-term average, on many rivers.

That the irrigation industry is aware of this is clear by a recent NSW irrigators council newsletter outlining meetings with the Australian Bankers Association and pointing out that protection of environmental water is counter to the interests of the irrigation industry, which requires access to environmental water to support security of supply.

ToR 13: Any other related matters.

Many people in Western NSW feel that governments have abandoned the Barwon-Darling River and its communities. There are several things that point to this.

- 1. The Barwon-Darling Water Sharing Plan, which contains extraction limits on A class pumping that were never introduced.
- 2. The sales of water from irrigation to the environment that will rarely, if ever, arrive. The Tandou sale is a good example, and there are others. In a letter to Barnaby Joyce when he was the Minister, the Commonwealth Department of Water acknowledged that any chance of the water getting to any part of the Darling was remote. From the Department's point of view an attraction of the sale was that it reduced downstream water demand and removed the need to manage water entitlements from the Menindee Lakes for the Lower Darling.
- 3. The Broken Hill pipeline, which will further reduce government interest in getting water to the Darling. It was lobbied for by the irrigation industry. Cotton Australia puts it best in its annual report for last year;

"Another great example of united achievement was having the NSW Government commit to securing an alternative water supply for Broken Hill. This result was driven by a joint effort from BRFF [Border Rivers Food and Fibre], GVIA [Gwydir Valley Irrigators' Association], Namoi Water, Barwon-Darling Water, the Cotton Grower Associations and Cotton Australia. ...the pipeline will help drought- proof Broken Hill which...will provide more flexibility for managing the Menindee Lakes and also allow optimal use of water resources in the system for environmental and irrigation purposes. The pipeline is a win for the community, the environment and irrigating farmers, and a solution Cotton Australia and its allies have long lobbied for."

4. The NSW and Commonwealth governments' reluctance to protect community water from extraction unless under sustained media and community pressure. This is consistent with the wishes of the irrigation industry.

Evidence of the wishes of the irrigation industry is found in a recent NSW Irrigators Council Weekly Update stating that it is working with the Australian Bankers Association to lobby the NSW government about concerns that community and environmental water will be protected. It uses the embargoes that have stopped pumping from the Barwon-Darling as an example. The Irrigators' Council Newsletter says;

"The concerns of the bankers shared by NSW Irrigators' Council is that the measures being considered for the shepherding of environmental water may erode the value of irrigator water rights and reduce the collateral value of entitlements as security for loans."

The problems of the Barwon-Darling are not accidental or unintended. They are predictable results of government policy.

MDBA has taken a hands-off approach and left the implementation to the states and the purchase of water to the Commonwealth Department of Agriculture. The MDBA is open that it has no power to do much, or anything, and that action is the responsibility of the states.

Growing concentration of water and power in a small number of hands, distortion of policymaking by corporate interests, poor or no regulation of access to or trading of the resource, political support for the irrigation industry at the expense of the broader community, and agency helplessness or enabling, are features of Australian water policy.

References

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